

GREENWOOD FURNACE
5 miles East of McAlevy's Fort
on SR305
McAlevy's Fort Vicinity
Huntingdon County
Pennsylvania

HAER No. PA-287

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD

GREENWOOD FURNACE

HAER No. PA-287

Location: 5 miles East of McAlevy's Fort on SR 305, McAlevy's Fort Vicinity,
Jackson Township, Huntingdon County, Pennsylvania

Date of Construction: 1834, 1864

Builder: John Hagey for Norris, Rawle & Company

Present Owner: Pennsylvania Department of Forest and Waters

Present Use: State Park

Significance: Greenwood Furnace was the last Huntingdon County iron furnace to go out
of blast (1904). Using locally-mined iron ore, Greenwood Furnace supplied
iron to its extensive roll and bar works near Lewistown in Mifflin County.
Eventually, this works became Standard Steel Co., manufacturer of steel
railroad wheels, which accounts for the furnace's longevity.

Project Information: In February, 1987, the Historic American Engineering Record (HAER) and
the Historic American Buildings Survey (HABS) began a multi-year historical
and architectural documentation project in southwestern Pennsylvania.
Carried out in conjunction with America's Industrial Heritage Project
(AIHP), HAER undertook a comprehensive inventory of Huntingdon County
to identify the region's surviving historic engineering works and industrial
resources.

Compiler: Gray Fitzsimons and Kenneth Rose, Editors

DESCRIPTION: Located on the grounds of a state park and nursery, structures surviving from the period of iron production at Greenwood Furnace (1834-1904) include: two furnace stacks, six buildings, worker house foundations, church and cemetery. Furnace structures are now intermixed with forestry department structures built from 1906 to 1930, Civilian Conservation Corps (CCC) construction from the 1930s, and more recent park and nursery buildings. Ironmaster's Mansion (1834): the four-bay, two-story house of coursed stone rubble has a two-story rear ell with a half gable roof. Alterations to the original house include removal of the plaster coating (visible in early photographs), the addition of two external chimneys and probably the addition of the little south side bay; the interior is said to be much altered. Church (1865): a one-story rubble stone building, gable to front, with a side entrance porch and cross-gabled cupola. Meat House: a one-and-one-half-story log building with a rough rubble stone foundation. It has narrow white siding like later nursery buildings. Blacksmith Shop: a one-story post-and-beam structure, 85' x 30'; it has new board-and-batten siding and metal roofing and it has been converted into a museum. Bookkeepers' House: a three-bay, two-story post-and-beam house, 33' x 32' including ell, has a rubble stone foundation and old board-and-batten siding under its present narrow horizontal siding. Stable near Bookkeeper's House: a one-story post-and-beam outbuilding with old vertical siding under the present horizontal siding. Stack No. 1 (1834): the ruins of this stack, approximately 15' high, were excavated about 1976; recent stone infill of the north arch is poorly done. Stack No. 2 (1864): the 30' x 30' x 30' stack of coursed sandstone blocks was reconstructed in 1936 by the CCC, leaving its four arches open to walk through. The crucible remains exposed and the stack open to the top. The furnace is capped with concrete.

HISTORY: Greenwood Furnace was established in 1834 by Norris, Rawle & Co. Comprised of entrepreneurs from southeastern Pennsylvania, this firm had recently acquired the Freedom Iron Works near Lewistown, Mifflin County. Their intention was to produce pig iron at Greenwood for refining at Freedom Forge. The availability of large tracts of virgin timber to supply charcoal to the furnace dictated Greenwood's remote location. Originally, iron ore and some of the limestone needed was hauled to the furnace from the Mifflin County side of Stone Mountain, and the iron hauled thirteen miles back over the mountain to the forge. Later, discovery of ore deposits closer to the furnace eliminated some of this difficult labor.

John Hagey contracted to construct the furnace, and the stone stack was first assessed in 1835, at \$10,000. By 1850 the operation employed seventy-three men and thirty-four horses and mules in annual production of 1,600 tons of pig iron, worth \$35,000. Ownership of the enterprise passed in 1849 to John A. Wright & Co., whose principal owner was the same John A. Wright then engaged in laying out and promoting the new railroad center of Altoona. Total capital investment had risen to \$40,000 in 1850.

In 1857, a reorganized Freedom Iron Co. -- in which John A. Wright remained an important figure -- resumed ownership. The operation expanded and in 1860 had a total capital investment of \$100,000, 140 employees, and produced 1,800 tons of iron. A second furnace was erected in 1868, resulting in an 1870 report of \$400,000 capital invested, 230 men employed, and more than 3,000 tons of iron produced (worth \$154,000), making it the county's largest iron operation.

Freedom Iron Company became Logan Iron and Steel Co. in 1872, and continued to operate Greenwood Furnace until 1904. It was the last Huntingdon County furnace to go out of blast. Its longevity can certainly be credited in part to the utilization, by the parent company, of the iron from Greenwood in the production of rolled and bar iron at its extensive Mifflin County works. The operation there gave rise to Standard Steel Co., manufacturers of steel railroad wheels, which survives today at Freedom Iron Company's original location near Lewistown.

The Pennsylvania Department of Forest and Waters acquired the Greenwood Furnace lands for reforestation soon after the last blast in December 1904. A state tree nursery was established at Greenwood in 1905, and a

state park in 1930. Both have erected structures on the site that are historically interesting themselves. A dam in the park is included in a National Register listing of CCC projects in Pennsylvania; it is of special significance because it was used in conjunction with a small turbine and generator unit to produce electricity for the park before commercial electric service was available in the area. The small stone generating tower remains at the breast of the dam, and the turbine and generator, although removed from the tower, remain in storage at the park.

Greenwood Furnace is the county's most complete and best-preserved iron furnace site open to the public. The stacks, church, and cemetery, along with a reconstructed charcoal-burner's hut and a museum in the former blacksmith shop, are maintained as historic sites and interpreted for park visitors. Research at the site, including archeological work at the stacks and workers' house foundations, has been continuing since 1976, and new interpretive displays for the museum are currently being developed.

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